IMPORTANT

1951 Lionel train outfits are designed for use with "Multi-Control" transformers which are equipped with built-in controls for operating the locomotive reversing mechanism and for blowing the train whistle. For this reason 1951 outfits do not include a separate No. 167 Whistle Controller previously furnished with all whistling outfits.

All "027" outfits include a No. 1033 "Multi-Control" Transformer which is suitable for operating the outfit plus a few accessories.

"O" outfits do not include a transformer; a separate transformer to fit the requirements of your model railroad must be purchased from your dealer.

All Contents Copyrighted 1951 by
THE LIONEL CORPORATION
15 E. 26th Street, New York 10, N. Y.

Printed in U. S. of America
No. 926-51

TABLE OF CONTENTS

PART ONE
How to Assemble and Operate Your First Lionel Outfit

HOW TO ASSEMBLE YOUR LAYOUT Page 3
Assembling the Track — Attaching Lockon to Track — Connecting the Wires — How an Assembled Layout Should Look

HOW TO SET UP YOUR TRAIN Page 5
Check and Lubricate Your Equipment — Set Up the Train — Check Your Power Supply

HOW TO OPERATE THE TRAIN Page 6
Changing the Train Speed — Reversing the Locomotive — How to Disconnect Reversing Mechanism — Blowing the Whistle — Flashlight Cells for Horns — "Magne-Traction" Locomotives — Smoke Locomotives — Short Circuits — Remote Control Track Sets — Coupling and Uncoupling Cars — Fixed Voltage for Remote Control Track

AUTOMATIC OPERATING CARS Page 10
Cars Using Contact Sliders — Plunger-Operated Cars — No. 3472 Automatic Milk Car — No. 3656 Operating Stock Car

SPECIAL OPERATING CONDITIONS Page 14
Use of No. 167 Whistle Controller — Direct Current Operation

PART TWO
How to Operate Lionel Accessory Railroad Equipment

ABOUT LIONEL TRACK Page 15
Lionel Track Sizes — Laying the Track — Removing Track Pins — Track Switches and Crossings

ABOUT TRACK SWITCHES Page 17
No. 022 Remote Control Switch — Fixed Voltage Plug — Non-Derailing Operation — Reversing Switch Motor — No. 1121 Remote Control Switch — No. 1024 and No. 042 Manual Switches

AUTOMATIC SIGNALLING Page 20
Using 145C Contactor — No. 252 Crossing Gate — No. 145 Gateman and No. 151 Semaphore — No. 153C Contactor and No. 153 Stop Signal — Operating Two Trains — Insulated Track Sections — No. 154 Crossing Signal — No. 1045 Flagman

ILLUMINATED ACCESSORIES Page 27
No. 256 Freight Shed and No. 395 Floodlight Tower — Parallel Connections

OPERATING ACCESSORIES Page 28
No. 97 Coal Elevator — No. 164 Lumber Loader — No. 364 Lumber Loader and No. 379 Coal Loader — No. 456 Coal Ramp — No. 213 Lift Bridge — No. 132 Automatic Station — No. 30 Water Tower — No. 394 Rotating Beacon — No. 455 Oil Derrick — Voltages Required by Accessories

ABOUT YOUR POWER SUPPLY Page 36
Household Power Lines — Voltages Supplied by Lionel Transformers — About Wattage — Power Requirements — About Voltage — Using Auxiliary Lockons

PART THREE
How to Build a Model Railroad

PLANNING A MODEL RAILROAD Page 39
Planning for the Future — Elevate Your Layout — Make Use of "Magne-Traction"

FIVE INTERESTING LAYOUTS Page 41
Making Odd-Length Track — Expanding Your Pike — "O" and "072" Layouts — Realism With Scenery — Automatic Train Operations — Running a Railroad

PART FOUR
How to Take Care of Lionel Equipment

WHAT YOU CAN DO YOURSELF Page 47
Cleaning Your Equipment— Lubricating Lionel Trains — When tot Use Lubricant — When to Use Oil — Lubricating Train Whistle — How to Clean Motors — Lubricating Car Trucks — Replacing Headlight Lamps — Replacing Horn Cells — Motor Trouble Shooting — Finding Short Circuits

LIONEL AUTHORIZED SERVICE STATIONS Page 53